Contracts to Be Let

Bids received until June 24, 1915.

Reduction Plant

Detroit, Mich.

Sealed proposals for the erection and completion of Reduction Plant on the Northeast side of the Detroit Terminal Railroad, between Shoemaker and Harper Aves., addressed to the Department of Public Works, will be received at the office of the Commissioner, City Hall, Detroit, until 10:00 A.M. on the 24th day of June, 1915.

Each proposal shall include the entire building work and plumbing, consisting of the following:

Masonry
Stone
Cement Tile
Steel and Iron
Steel sash
Marble & Terrazzo
Lathing & Plastering
Carpentry
Roofing and Sheet Metal Work
Painting
Glazing
Plumbing

Each bid shall be accompanied by a certified check in the sum of Four Thousand ($4000.00) Dollars as surety for the acceptance of the contract, payable on its face to the Department of Public Works of the City of Detroit.

The accepted bidder will be required to furnish two bonds each in a sum equal to the full amount of the contract.

Proposals shall be made in accordance with the plans and specifications prepared by Smith, Hinchman & Grylls, on file in their office, copies of which may be secured upon application.

The plans and specifications are the property of the Architects and a deposit of $20.00 will be required for the safe return of each set taken away by Bidders. Plans and specifications shall be returned and if same are in good and usable condition the deposit will be returned to the Bidder.

The Commissioner reserves the right to reject any or all proposals, and to waive all informalities therein.

GEO. H. FENKELL, Commissioner.

Bids received until June 4, 1915.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS.

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. on Friday, the 4th day of June, 1915, for the construction and repair of highways in the following counties:

Albany, 3 highways (3.41; 5.76; 4.20), 2 contracts (resurfacing); Cattaraugus, 1 highway (4.29); Cayuga, 1 contract (broken stone); Chemung, 1 highway (8.98); Dutchess, 1 contract (surface treatment); Essex, 2 highways (3.31; 0.52); Jefferson, 1 highway (4.60); Monroe, 2 highways (8.39; 1.51); Niagara, 1 contract (broken stone); Oneida, 1 highway (7.76), 2 contracts (resurfacing), 1 contract (surface treatment); Orange, 1 highway (6.27); Orleans, 3 highways (2.87; 7.46; 0.17); Oswego, 2 highways (7.75; 5.12), 1 contract (resurfacing); Rensselaer, 1 contract (surface treatment); St. Lawrence, 1 highway (5.66); Schenectady, 1 contract (resurfacing); Schuyler, 2 highways (8.98; 7.60); Seneca, 1 contract (broken stone); Tompkins, 1 highway (7.60); Wayne, 1 contract (broken stone).

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose divisions the roads are to be constructed or repaired. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "Information for Bidders' in the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.

I. J. MORRIS, Secretary.

Bids received until July 12, 1915.

County Highway Tunnel

OFFICE OF THE CONTROLLER OF ALLEGHENY COUNTY.

Pittsburgh, Pa., June 1st, 1915.

Sealed proposals will be received at this office until 1:30 o'clock P.M., Monday, July 12th, 1915, and will at that time be publicly opened by the County Commissioners, for the construction of a tunnel and the approaches thereto, known as "County Highway Tunnel No. 1," extending from the southerly side of East Carson Street near Third Street, Pittsburgh, in a southerly direction to a point on Warrington Avenue, near Boggs Avenue, Pittsburgh, Pa. The proposals submitted must be on the blank form of proposals which are bound with the contract, specifications and information for bidders, and must be addressed to the County Commissioners of Allegheny County, Pennsylvania, and deposited with the County Controller, marked "Proposal for County Highway Tunnel No. 1." Proposals must be accompanied by a certified check in the sum of One Hundred Fifty Thousand ($150,000.00) Dollars, made payable to the Commissioners of Allegheny County, to be returned to the unsuccessful bidders three days after the awarding of the contract. Within ten (10) days after receiving final notice of the awarding of the contract, the successful bidder will be required to execute the contract and furnish a proper surety bond, satisfactory to and to be approved by the County Commissioners, in the sum of Fifty (50%) per centum of the amount of the contract price, conditioned for the faithful performance of all the terms and provisions of the contract.

Copies of the form of proposal, contract and information for bidders and copies of the plans and specifications may be obtained at the office of A. D. Neeld, Consulting Engineer for the County of Allegheny, at No. 237 Fourth Avenue, Pittsburgh, and at the office of the County Commissioners, Court House, Pittsburgh, Pa., on and after June 7th, 1915. Those desiring to bid may have plans and specifications upon the deposit of Twenty-five ($25.00) Dollars, which will be refunded if said plans and specifications are returned in good condition within ten (10) days after the bids have been received and acted upon by the County Commissioners.

The County Commissioners reserve the right to reject any and all bids.

HYATT M. CRIBBS,
County Controller for the County of Allegheny.

Bids received until June 15, 1915.

Greenhouses for Executive Mansion

Albany, N. Y.

Sealed proposals, Construction Work for Greenhouses, for the New York State Executive Mansion, Albany, N. Y., will be received by the Trustees of Public Buildings at the Capitol, Albany, N. Y., until 4 o'clock P.M. on Tuesday, June 15, 1915, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of $75.00 for Proposal No. 1 and $225.00 for Proposal No. 2. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of 50% of the amount of contract within thirty days after official notice of award of contract and in accordance with the terms of specification No. 2277. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Bids received until June 15, 1915.

Street Improvements

DEPARTMENT OF PUBLIC WORKS.

Philadelphia, Pa.

Sealed proposals will be received until 12 o'clock, noon, on Tuesday, June 15th, 1915, for, and opened at that time in Room 225, City Hall:

Improvement of the Northeast Boulevard and Branches, from Rhawn St. northward.

Estimated quantities of the principal items of work to be done are as follows:

Grading	232,605 cu.yds.
Bituminous Pavement	58,457 sq.yds.
Sewers	7,257 lin.ft.
Vitrified Block Paving	9,220 sq.yds.
Concrete Curb	17,490 lin.ft.
Concrete Footways	10,915 sq.yds.
Topsoil	72,000 sq.yds.
Electrical conduits	3,000 lin.ft.
Trees and Shrubs	2,400

Together with the necessary incidental work.

A charge of five (5) dollars will be made for each set of specifications and drawings, which will be refunded upon the return of the unused specifications and drawings in good condition, or upon the return of the drawings in case a bid is submitted.

Inquire at Room 232, City Hall, Philadelphia.

M. L. COOKE, Director.

Bids received until June 9, 1915.

Electric Traveling Cranes, etc.

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office, Suite 200, New Orleans Court Building, until June 9th, at 8 o'clock P.M., and then be publicly opened, for the furnishing and erecting of fifteen (15) or more Electric Traveling Cranes, two (2) Transfer Cranes, and one Crane Transfer and Elevator, for the Cotton Warehouses and Terminal, located on the east bank of the Mississippi River between Valence and Soniat Streets.

Deposit required with proposal $3,000.

Bond required with contract $20,000.

On and after May 22nd, plans and specifications will be on file at the office of Ford, Bacon & Davis, 921 Canal Street, New Orleans, La., where full sets will be furnished to prospective bidders on a deposit of $25.000, which will be refunded to bidders who submit proposals. $15.00 will be refunded to bidders who do not submit proposals.

The right is reserved to reject any and all bids.

ERNEST M. LOEB, President.

Bids received until June 14, 1915.

Concrete Pavement

Sault Ste. Marie, Mich.

Sealed proposals will be received by the Board of Public Works, Sault Ste. Marie, Mich., not later than 4 P.M., Monday, June 14th, 1915, and then publicly opened, for the construction, in accordance with the plans and specifications on file at the office of Ross A. Frederick, City Engineer, of a bituminous coated concrete pavement on Portage Avenue between Bingham Avenue and the Portage Avenue Bridge, consisting of approximately 12,000 sq.yds. of pavement with the adjacent curbs and approaches.

All bids are to be accompanied by a certified check in the amount of 5% of the pavement bid, which check of the successful contractor will be retained by the Board until after the execution of the contract.

The right is reserved to reject any or all bids.

BOARD OF PUBLIC WORKS.

A. J. EATON, Secy.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 21, 1915.—Sealed proposals will be opened in this office at 3 p.m., July 2, 1915, for the construction complete (including mechanical equipment and approaches) of a two-story and basement stone and brick-faced building of 17,000 square feet ground area, fireproof construction, composition and copper roof, for the United States post office and courthouse at Charlotte, N. C. Drawings and specifications may be obtained from the custodian of the site at Charlotte, N. C., or at this office, in the discretion of the Acting Supervising Architect. JAS. A. WETMORE, Acting Superv. Architect.

Bids received until June 16, 1915.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS.

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock p.m. on Wednesday, June 16th, 1915, for the improvement of highways in the following counties:

Broome, 2 highways (0.68; 2.32); Delaware (approx. length 2.50); Fulton (approx. length 4.58); Hamilton, 2 highways (4.22; 4.54; Lewis (approx. length 6.86); Monroe, 2 highways (4.54; 6.05); Niagara, 4 highways (1.32; 4.42; 2.33; 5.07); Herkimer (approx. length 8.89); Oneida (approx. length 8.89); Onondaga, 3 highways (3.06; 7.23; 1.91); Orleans, 2 highways (2.46; 1.80); Rensselaer, 2 highways (0.34; 0.88).

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the offices of the Division Engineers in whose divisions the roads are to be constructed. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especal attention of bidders is called to "Information for Bidders" in the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.

IRVING J. MORRIS, Secretary.

Bids received until June 9, 1915.

Return Tubular Boilers, etc.

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office, Suite 200, New Orleans Court Building, until June 9th, at 8 o'clock P.M., and then be publicly opened for furnishing and installing three horizontal return tubular boilers, with settings, breeching and appurtenances to be installed in the Cotton Warehouses and Terminal, located on the east bank of the Mississippi River between Valence and Soniat Streets.

Deposit required with proposal $500.00.

Bond required with contract $3,000.00.

On and after May 22nd, plans and specifications will be on file at the office of Ford, Bacon & Davis, 921 Canal Street, New Orleans, La., where full sets will be furnished to prospective bidders on a deposit of $25.00, which will be refunded to bidders submitting proposals. To bidders who do not submit proposals, $15.00 will be refunded.

The right is reserved to reject any and all bids.

ERNEST M. LOEB, President.

Bids received until June 8, 1915.

Sheet Asphalt Paving

Rahway, N. J.

Sealed proposals will be received by the Common Council of the City of Rahway, N. J., Tuesday evening, June 8th, at 8 o'clock, at the City Hall, for the paving of Milton avenue, from the Pennsylvania Railroad to St. Georges avenue, with sheet asphalt pavement. Approximate amount of work to be done:

Excavate present surface of street to subgrade.
Lay 10,270 sq.yds. of sheet asphalt pavement on 6 inch concrete foundation.
Reset 5311 lin.feet of curb in concrete.

A certified check for $1000.00 to accompany each bid, payable to "The Mayor and Common Council of the City or Rahway."

The Common Council reserves the right to reject any or all bids.

FRANKLIN MARSH, City Engineer.

Rahway, N. J., May 24th, 1915.

TREASURY DEPARTMENT, U. S. Coast Guard, Washington, D. C., May 28, 1915.—Sealed proposals will be received at this office until 2 o'clock p.m. of Tuesday, June 15, 1915, and then publicly opened, for the construction of a Coast Guard station and accessories and moving present building, at Oswego, New York. Specifications and drawings, form of proposal, etc., and full information can be obtained upon application to the Superintendent, Tenth District, Coast Guard, Buffalo, New York; the Keeper, Oswego Coast Guard Station, Oswego, New York; or to this office. E. P. BERTHOLF, Captain Commandant.

Contractors

BIDS OPENED JUNE 15, 1915,

for the construction of Section No. 1 of Route No. 29, being a part of the Eastern Parkway Rapid Transit Railroad. (Nostrand Ave. branch.)

A two-track underground railroad in the Borough of Brooklyn, beginning at a point under Eastern Parkway about 192 ft. west of Nostrand Ave. and running thence under Eastern Parkway and Nostrand Ave. to a point about 220 ft. south of Church Ave.

Write or call concerning form of contract, plans and specifications.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT,
154 Nassau St., New York City.

⁂

Bids received until June 25, 1915.

Water-works Elevated Water Tower

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.
City of Stratford, Ontario, Canada.

Specifications for a 500,000 Imperial gallon elevated water tower will be issued on Friday, June 4th, and Sealed Tenders, mailed to the undersigned, and marked "Tender for Stratford Elevated Water Tower," will be accepted until 9 a.m. on Friday, June 25, 1915. Copies of the above specifications, and form of tender, can be obtained from the address given below.

The lowest or any tender will not necessarily be accepted.

F. A. GABY, Chief Engineer,
Hydro-Electric Power Commission of Ontario,
Continental Life Building, Toronto, Ontario.

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U. S. ENGINEER OFFICE, 337 Federal Building, Detroit, Mich., May 5, 1915.—Sealed proposals for excavation of Earth and Rock, U. S. Power Plant Tail Race, St. Marys River, Mich., will be received at this office until 12 M., June 15, 1915, and then publicly opened. Information on application. MASON M. PATRICK, Lt.-Col., Engineers.

U. S. ENGINEER OFFICE, Room 305 Southern Building, Washington, D. C., May 27, 1915.—Sealed proposals for furnishing and delivering 300 tons, 25% more or less, Sulphate of Alumina will be received here until 12 M., June 26, 1915, and then publicly opened. Information on application.

PROPOSALS FOR REPAIRS, SOUTH DOCK, ETC.—Office Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1915, and then opened, for reconstruction and repairs to South Dock and Ferry Slip. Further information application.

U. S. ENGINEER OFFICE, Newport, R. I., May 29, 1915.—Sealed proposals for rebuilding basin walls and repairing breakwaters and harbor walls at harbor at Block Island, R. I., will be received here until 12 o'clock noon, June 29, 1915, and then publicly opened. Information on application. JOHN MILLIS, Col., Engrs.

PROPOSALS FOR LEVEE WORK—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 17, 1915, for constructing about 175,000 cubic yards of earthwork in the East Side Levee and Sanitary District, Ill. Further information on application.

FORT HUACHUCA, Ariz., May 8, 1915.—Sealed proposals, in triplicate, will be received here until 1 P.M., June 9, 1915, and then opened, for furnishing all materials, machinery and labor required in constructing complete an electric light and refrigerating plant and installing interior and exterior wiring system. $10 deposit required for plans and specifications. For information address CONSTRG. QUARTERMASTER.

U. S. ENGINEER OFFICE, Louisville, Ky., May 4, 1915.—Sealed proposals for furnishing and erecting one Mitering Guard Gate of two leaves, for Lock No. 41, Ohio River, will be received here until 12 noon, Central time, June 4, 1915, and then publicly opened. Information on application. J. C. OAKES, Maj., Engrs.

U. S. ENGINEER OFFICE, Newport, R. I., May 12, 1915.—Sealed proposals for rebuilding wharves and building new sea wall and coal house, at U. S. Bureau of Fisheries Station at Woods Hole, Mass., will be received here until 12 o'clock, noon, June 12, 1915, and then publicly opened. Information on application. JOHN MILLIS, Col., Engrs.

U. S. ENGINEER OFFICE, Newport, R. I., May 17, 1915. Sealed proposals for dredging in the harbor of refuge at Block Island, R. I., will be received here until 12 o'clock, noon, June 16, 1915, and then publicly opened. Information on application. JOHN MILLIS, Col., Engrs.

Bids received until June 14, 1915.

Sewer

Greenwich, Conn.

Sealed proposals will be received by the SEWER COMMISSIONERS of the Town of Greenwich, Connecticut, at their Office in the Town Building until eight o'clock P.M., on MONDAY, JUNE 14th, 1915, for constructing about 22,500 feet of SEWER in various Streets of Sewer District No. 9, East Port Chester Section.

Plans and Specifications can be seen at the Office of the Engineer, Mr. S. E. Minor, Room No. 5, Greenwich Trust Company Building, No. 96 Greenwich Avenue, or the Sewer Commissioners' Office, Room No. 2, Town Building, Greenwich Avenue. The right is expressly reserved to reject any or all bids.

WILLIAM WILSON HEATON,
ISAAC M. HUBBARD,
ALBERT C. PECK,
Sewer Commissioners of the Town of Greenwich, Connecticut.
Dated Greenwich, Connecticut, May 26th, 1915.

⁂

Bids received until June 21, 1915.

Steam Pumping Machinery

Salem, Massachusetts.

Sealed proposals will be received by the Director of Public Works of the City of Salem, Mass., until 10 A.M., June 21, 1915, for furnishing and erecting two 10,000,000 gallon steam pumps with the necessary appurtenances.

Specifications and other information may be obtained at the office of William S. Johnson, Consulting Engineer, 101 Tremont St., Boston, Mass.

The right is reserved to reject any or all bids.

P. J. KELLEY, Director of Public Works.
GEORGE F. ASHTON, City Engineer.

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PROPOSALS FOR COAL.—U. S. Engineer Office, Wilmington, N. C.—Sealed proposals will be received here until 12 M., June 28, 1915, and then opened for furnishing about 13,000 tons of bituminous coal. Further information on application.

U. S. ENGINEER OFFICE, Room 707, Army Building, 39 Whitehall St., New York, N. Y.—Sealed proposals will be received here until 12 M., June 28, 1915, and then opened, for dredging in Newtown Creek, N. Y. Further information on application.

U. S. ENGINEER OFFICE, 337 Federal Building, Detroit, Mich.—Sealed proposals for furnishing and delivering at Sault Ste. Marie, Michigan, about 325 tons of steel, etc., for construction of Fourth Lock, will be received at this office until 12 noon, June 30, 1915, and then publicly opened. Information on application.

PROPOSALS FOR DREDGING.—U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa.—Sealed proposals will be received here until 12 NOON, JUNE 21, 1915, and then opened, FOR DREDGING IN DELAWARE RIVER, opposite Port Richmond coal piers, Philadelphia harbor. FURTHER information on application.

FORT SILL, OKLA., May 15, 1915.—Sealed proposals in triplicate will be received here until 11 A.M., June 15, 1915, for constructing Quartermaster Corps Barrack, double set engineer's quarters magazine, additions to 4 barrack buildings, 5 stables, repairing 9 double officers quarters, 3 barrack buildings, band barrack, shops and coal houses. Information on application. CONSTRUCTING QUARTERMASTER.

U. S. ENGINEER OFFICE, Savannah, Ga., May 21, 1915.—Sealed proposals for repairs to bank protection of Savannah River at Augusta, Ga., will be received at this office until 12 noon (Eastern Standard Time), June 21, 1915, and then publicly opened. Information on application. W. C. LANGFITT, Colonel, Engineers.

U. S. ENGINEER OFFICE, Room 707, Army Building, 39 Whitehall St., New York, N. Y.—Sealed proposals will be received here until 12 M., June 25, 1915, and then opened, for furnishing and placing riprap and repairing sea wall at Governors Island, N. Y. Further information on application.

PROPOSALS FOR STRUCTURAL METAL.—U. S. Engineer Office, Vicksburg District, Vicksburg, Miss.—Sealed proposals will be received here until 12 m., June 15, 1915, and then opened, for furnishing steel lock gates, valves, Poiree trestles, operating machinery, etc., aggregating about 450,000 pounds. Further information on application.

Bids received until June 22, 1915.

Coagulating Plant

SEALED BIDS will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Tuesday, June 22, 1915, for Contract 159, for the construction of a coagulating plant in the Town of Mt. Pleasant, Westchester county, New York. The structure will be of steel, about 26 feet wide by 67 feet long, inside of which will be a steel bunker for storing about 600 tons of sulphate of alumina and a conveyor for raising the material to this bunker.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer at the above address.

CHARLES STRAUSS, President,
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.
W. BRUCE COBB, Secretary.

Bids received until June 16, 1915.

Building Improvements

Brooklyn, N. Y.

Sealed proposals for Construction Work—Rebuilding Old Wall in Main Building at the Long Island State Hospital, Brooklyn, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 2:30 o'clock P.M. on Wednesday, June 16, 1915, when they will be opened and read publicly.

Proposals shall be accompanied by certified check in the sum of $200.00 and the Contractor to whom the award is made will be required to furnish surety company bonds in the sum of 50% of the amount of contract within thirty days after official notice of award of contract, and in accordance with the terms of specification No. 2201.

Drawings and specifications may be consulted and blank forms for proposal obtained at the Long Island State Hospital, Brooklyn, N. Y., or at the office of the State Architect. Complete sets of plans and specifications will be furnished prospective bidders upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

OFFICE OF THE COMMISSIONERS, D. C., June 1, 1915.—SEALED PROPOSALS will be received at this office, Room 509 District Building, until 2 o'clock P.M., on June 10, 1915, for the construction of Section 4 of Anacostia Main Interceptor, in the District of Columbia, involving the construction of about 3,000 linear feet of trunk sewer 4′ 6″ x 5′ 0″. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. OLIVER P. NEWMAN, LOUIS BROWNLOW, CHARLES W. KUTZ, Commissioners, D. C.

Bids received until June 10, 1915.

Sewers and Disposal Plant

Montrose, Pa.

Sealed proposals will be received by the Borough Council of Montrose, Pa., until 7:30 P.M. of June 10, 1915, at the office of H. A. Denny, Borough Solicitor, for constructing about one-half (½) mile of sanitary sewers, concrete treatment tanks, etc.

Deposit of Ten Dollars ($10.00) required on plans and specifications.

Plans, proposal, detailed instructions to bidders, and specifications may be obtained from F. H. Shaw, Consulting Engineer, 308 Breneman Bldg., Lancaster, Pa.

The right to reject any or all bids is reserved.

A. J. WHEATON, Secretary of Council.

F. H. SHAW, Consulting Engineer.

DEPARTMENT OF THE INTERIOR, U. S. RECLAMATION SERVICE, Washington, D. C., May 28, 1915.—Sealed proposals will be received at the office of the United States Reclamation Service, Great Falls, Montana, until 2 o'clock P.M., July 1, 1915, for the construction of canals and structures on the Sun River Project, Montana, involving about 455,000 cubic yards of excavation, about 4,290 cubic yards of reinforced concrete, the manufacture and laying of about 4,560 linear feet of concrete pipe, and the placing in wooden structures of about 265,000 feet B.M. of lumber. The work is situated about twenty-five miles northwest of Great Falls, Montana, and about three miles south of the towns of Bole, Sloan and Codrova, Montana, stations on the Choteau Branch of the Great Northern Railway. For porticulars address the United States Reclamation Service, Washington, D. C.; Great Falls, Mont., or Fort Shaw, Mont. A. P. DAVIS, Chief Engr. Engineer.

PROPOSALS FOR STEEL HIGHWAY BRIDGE ACROSS THE COLORADO RIVER.—Department of the Interior, Office of Indian Affairs, Washington, D. C., May 25, 1915.—Sealed proposals plainly marked on the outside of sealed envelope, "Proposals for steel highway bridge across the Colorado River near Topock, Arizona, and addressed to the Commissioner of Indian Affairs, Washington, D. C., will be received at the Indian Office until 2:00 P.M., June 19, 1915, for furnishing materials and labor for the construction of a steel highway bridge across the Colorado River at or near Topock, Arizona, in strict accordance with plans, specifications, and instructions to bidders, which may be examined at the office of the paper or periodical in which this advertisement appears, at United States Indian Warehouses at Chicago, Illinois, St. Louis, Missouri, and San Francisco, California, and at the office of the Superintendent of the Fort Mojave School, post office address, Mojave City, Arizona. For further information apply to the Superintendent of Fort Mojave School. CATO SELLS, Commissioner.

PROPOSALS FOR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, Buffalo, N. Y.—Sealed proposals will be received here until 11 a.m., June 23, 1915, and then opened, for construction of concrete superstructure on outer breakwater at Oswego Harbor, N. Y. Further information on application.

U. S. ENGINEER OFFICE, Cincinnati, O., May 26, 1915.—Sealed proposals for building a Power House at Dam No. 29, Ohio River, near Ashland, Ky., will be received here until 2 p.m., June 15, 1915, and then publicly opened. Information on application. H. JERVEY, Lt.-Col., Engrs.

Classified Advertising

Positions Wanted, 3 cents a word, minimum charge 50 cents an insertion, payable in advance.

Positions Open, (Civil Service Examinations), **Employment Agencies** (Labor Bureaus), **Business Opportunities, Wanted** (Agents and Salesmen—Contract Work), **Miscellaneous** (Educational—Books), **For Sale,** 5 cents a word, minimum charge $1.00 an insertion.

Count four words for keyed address care of New York; five for Chicago. Abbreviated words or symbols count as full words.

Copy should reach us not later than 10 A.M. Wednesday for that week's issue. Answers addressed to our care, Tenth Avenue at Thirty-sixth St., New York or 1144 Monadnock Block, Chicago will be forwarded (excepting circulars or similarliterature).

No information given by us regarding keyed advertiser's name or address. Original letters of recommendation or other papers of value should not be inclosed to unknown correspondents. Send copies.

Advertisements calling for bids, $3.60 an inch per insertion. N

POSITIONS WANTED

Mechanical and Electrical Engineers

MECHANICAL ENGINEER, Columbia graduate, some outside experience, desires position in engineering or manufacturing line offering opportunities. Location and salary immaterial. P. W. 314, Eng. News.

MECHANICAL ENGINEER, 35, technical school and 12 years' broad experience; New York interview. P. W. 326, Eng. Nenws.

Civil Engineers

WATER-SUPPLY, water power, dams, sewers; responsible charge, construction and design; present engagement soon terminates; age 34; Assoc. M. Am. Soc. C. E. P. W. 224, Eng. News.

CIVIL ENGINEER, Assoc. M. Am. Soc. C. E. desires position; 8 years' experience on the design of foundations and reinforced concrete bridges and buildings. Expert computer of arch stresses. P. W. 264, Eng. News.

CIVIL ENGINEER AND SUPERINTENDENT; 12 years continuous charge of engineering and construction work, mostly railroad; reinforced concrete a specialty; designing, estimating, etc.; experience in municipal work; executive ability; legal training; business education; references; moderate salary; just finished some work in Canada and available at any time for any location. For list of special training and experience. P. W. 260, Eng. News, Chicago

CIVIL ENGINEER; 28, single, American, technical, railroad location, design and construction, hydro-electric, water works, subways, tunnels, reports and estimates; tropics and north, speak Spanish. P. W. 261, Eng. News.

CIVIL ENGINEER, technical graduate, Member Am. Soc. C. E.; 16 years' experience in construction and design especially waterworks and highways; speaks and writes Spanish; free after June 1. P. W. 267, Eng. News.

CIVIL ENGINEER, graduate, Assoc. M. Am. Soc. C. E., 15 years' experience, responsible charge general construction, railroads and municipal improvements, surveys, expert computer, have instruments. P. W. 284, Eng. News.

GRADUATE CIVIL ENGINEER, 32, eight years' varied experience, construction and surveying, desires position with engineer, contractor or industrial company in vicinity of New York; moderate salary; have instruments. P. W. 310, Eng. News.

GRADUATE CIVIL ENGINEER, 13 years' experience in all classes of steel structures, bridges and subways; shop drawings, estimating and designing, past 10 years with leading bridge company, desires change. P. W. 301, Eng. News.

CONSTRUCTION CIVIL ENGINEER; six years' practical experience as erector on steel and industrial plant work, buildings, furnaces, machinery, steel, brick, concrete and excavation wants to make change. Will consider sales force, no experience. P. W. 309, Eng. News.

CIVIL ENGINEER, Assoc. Mem. A. S. C. E., 18 years' experience, municipal roads, bridges, reinforced concrete. Complete outfit, both office and field. References. P. W. 329, Eng. News, Chicago.

GRADUATE CIVIL ENGINEER with much experience in topography desires employment of any kind in civil engineer line. P. W. 330, Eng. News, Chicago.

CIVIL ENGINEER, graduate with high reference, twenty years' experience surveys, design, construction, railways, bridges, tunnels, foundations and hydraulic works open to engagement. P. W. 307, Eng. News.

GRADUATE CIVIL ENGINEER, desires position; two years field and office work rodman. Salary and location no object. P. W. 325, Eng. News.

CIVIL ENGINEER—Ten years' experience. Five years in charge. Technically educated. First class references and connections. Owing field and office outfit. Wants work, with or without equipment. Railroad, dams, water power. Locality no object. Correspondence invited. Foreign work by contract engagement. P. W. 323, Eng. News.

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CIVIL ENGINEER, graduate; six years' experience with engineers and contractors; railroads, sewers, power plants, subways. P. W. 317, Eng. News.

CIVIL ENGINEER, 26, graduate in Europe, wants position as a volunteer, construction work or office. P. W. 319, Eng. News.

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Draftsmen

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STRUCTURAL ENGINEER, Experienced designer, good executive, accustomed to handling men desires position as engineer or in charge of work; excellent references from past and present employers. P. W. 316, Eng. News.

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Dumping mixer.
Unloading bulk ...
Trimming sand ...
Holsting enginee...
Foreman .....

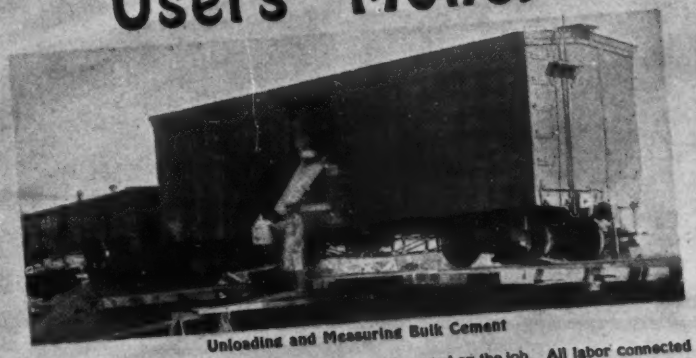
These are exc... the proportions ...

In handling ... on the charging ... unloading a car ... out 250 or more ... the matter of e... labor of one ma... tying, bundling ... ing from the ca...

The maximun... been slightly ove... required in a 7-... output is limited ... various points re... put of which the ... ing the plant it w... ...ed for a maximum duty of one batch a minute from a one-yard mixer. Those in charge estimate that it should be easily possible to turn out 60 batches, 1¼ yd. each, in an hour with this equipment, which would mean a possible total of over 500 cu.yd. in a day's run. The capacity of the storage bins is enough for 100 batches at least without renewal and the maximum rate of output would be easily obtainable by reason of the adequate facilities for unloading bulk cement and for obtaining sand and stone from the adjacent stockpiles or from supply cars on the siding.

The architectural design of the Northwest Station for the Commonwealth Edison Co. is by Holabird & Roche, Chicago. The steam-engineering work was laid out by Sargent & Lundy, Chicago, and the electrical work by the staff of the Commonwealth Edison Co. The Thompson-Starrett Co., of Chicago, with Fred D. Lyon in active ...perinte... ...is in ... of the building construction ... lant was designed following ... of the Dodge Manufactur... ...e cement is shipped in car... Universal Portland Cement ...ance of 30 miles.

Bulk Cement Saves Users' Money



Unloading and Measuring Bulk Cement

The Chicago & Alton Railroad found bulk cement so satisfactory in two season's experience in track elevation work that the chief engineer recommended it to West. Inghouse-Church Kerr & Co. when they started work on the Chicago & Alton Shops at Bloomington, Ill.

Investigation showed that no special equipment or storage bins were required. Cement was shoveled directly from the car into a measuring box, pivoted and gated at one end for emptying into a wheelbarrow. The concrete foreman stated that the one man in the car and the one cement wheeler could have handled much more cement than was required for the 100 cubic yards per day of concrete used.

With cement in bulk no money is tied up in sacks nor are any sacks lost, stolen or damaged on the job. All labor connected with sacks is eliminated, namely, unloading from car to storage shed, wheeling from shed to mixer, untying and emptying sacks at the mixer platform, and counting, bundling, checking and shipping empty sacks. The net cost of bulk cement is 2 cents less per barrel than the net cost in cloth. These savings total from 7 cents to 12 cents per barrel of cement used.

While the installation of an elevator and gravity bin for handling bulk cement is not necessary, such special equipment will result in still greater economy.

For information on this subject write for a copy of

"ECONOMY OF BULK CEMENT"

Universal Portland Cement Co.

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CHICAGO — 208 South La Salle Street
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12,000,000 Barrels Annually — Plants at Chicago and Pittsburgh

CONCRETE FOR PERMANENCE

...r the Flow of ... Pipes

...DERSON*

...egarding the formula for ...e following gives a discus...

...ezy's formula

$$\times \frac{h}{l}$$

...ient f varying with the ... dealing with water have ... manufacturers have al... ...ich is

$$\frac{D^5}{L}$$

...la for the given units ...

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$$)$$

... = diameter of the pipe ...ie coefficient decreases ...

... Formulas," read be... ...h 1912, J. M. Spitz... ...xtensive tests that the ...um value for a 12-in. ...ent increases rapidly; ...ficient also increases, ...ned by the fact that ...in friction between ...ut also due to the ...id or to the inter... ...o demonstrated by ...cal Transactions, ...).

Considering skin friction alone, the head lost will diminish as the diameter increases. Considering the in-

*Assistant Professor Mechanical Engineering, Armour Institute of Technology, Chicago, Ill.

We Put It Under the Table

An Air Chamber does not help the **Luitwieler** pump, so we put it under the table. The Cam Shaft is floating, no pressure on either side. This pump makes 220 double acting pump strokes per minute, $3\frac{1}{2}$″ x 4″ Pistons, 214 gallons per minute. Note the 5″ wire nails standing on head against the 2″ steel rollers--absolutely no vibration.

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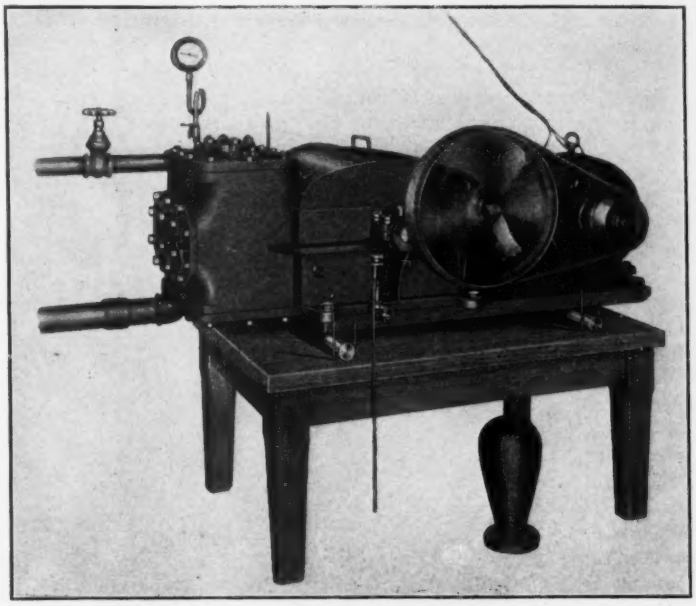
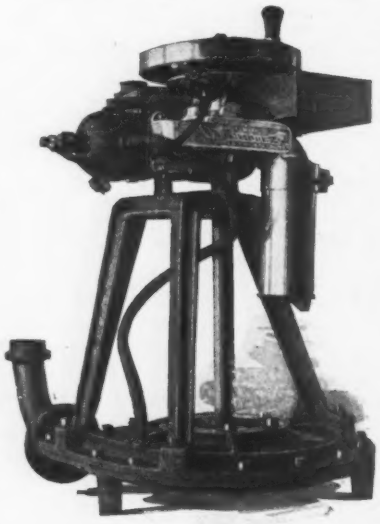


Luitwieler
Pumping Engine Co.
Rochester, N. Y.

Cheap Pumping



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EVINRUDE CENTRIFUGAL PUMP

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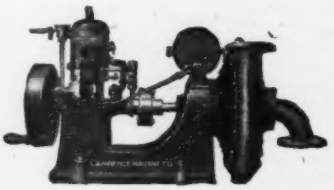

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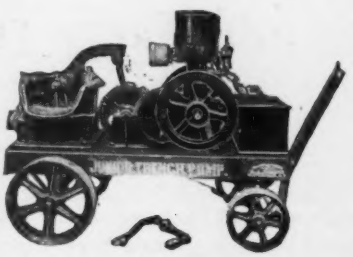

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